

ABSTRACT OF THE DISCLOSURE

A fuel cell is placed in parallel with a battery via a mechanical switch. The voltage is held nearly constant by the battery and the power flow is controlled by adjusting the fuel cell operating parameters (such as temperature or air flow) and by opening and closing the mechanical switch. The result is a system that operates at nearly constant voltage without the need for an expensive power conditioning system. The output of the system can then be processed via a traditional power conditioning system such as an inverter or dc-to-dc converter without the need for a wide range of input operating voltages. This reduces the cost and size of the fuel cell power conditioning system.